

## REMARKS

Reconsideration of the subject patent application in light of the present Amendment and Remarks is respectfully requested.

This amendment has been made to put this application in condition for immediate allowance. No new issues have been raised which require a further search.

Claims 1, 3, 5-9, 11-13, 15, 16, 19-21, 23-41 are pending. Claims 32-34, which were previously withdrawn from consideration, have been canceled without prejudice to Applicant's right to pursue the subject matter of these claims in a future continuation application. Claims 31 and 36-41 have also been canceled without prejudice to Applicant's right to pursue the subject matter of these claims in a future continuation application.

Claims 1, 23, 24 and 30 have been amended to more particularly point out and distinctly claim applicants' invention. Applicants have amended claims 1 and 23 as suggested by the Primary Examiner in the final Office Action at page 3, lines 5-8 and have amended claim 30, to delete "hexose in said xylose-containing" and add "comprising xylose and glucose", as suggested by the Primary Examiner at page 4, lines 21-23 of the final Office Action. Claims 24 has been amended to correct a typographical error, i.e. "cellulolytic" has been inserted. The typographical error was made through inadvertence and mistake without intent to deceive. No new matter has been added.

Entry of this Amendment is respectfully requested. Upon entry of the amendment, Claims 1, 3, 5-9, 11-13, 15, 16, 19-21, 23-30 and 35 will be pending.

### **Rejection under 35 U.S.C. § 112, first paragraph**

Claims 1, 3, 5-9, 11-13, 15, 16, 19-21, 23-31 and 35-41 have been rejected under 35 U.S.C. §112, first paragraph as containing subject matter which was not described in the specification as filed to reasonably convey that the inventors had possession of the claimed invention. Specifically, the Primary Examiner asserts that adequate support is not found in the specification for recitation of "at least 22.3 g/l" as the amount of ethanol in claim 1 and other independent claims as a lower limit of a range without an upper limit. The Primary Examiner states that specification supports 22.3 g/l as a lower limit of a range only when in combination with the highest amount of g/l alcohol disclosed, which is 51.2 g/l in Table 4 (page 21) and

suggests amending claims 1, 23 and 31 to delete “at least” and to insert after “g/l” --to 51.2 g/l--.

The Primary Examiner states that the specification fails to contain adequate support for “at least about 27.1%” in claims 36-38 and “at least about 20.6 g/l” in claims 39-41 as the lower limit of a range requiring “at least about 27.1%” and “at least about 20.6 g/l, respectively. The Primary Examiner asserts that there is adequate support only for the specific values of 27.1% and 20.6 g/l.

The Primary Examiner asserts that the specification fails to disclose a process having steps as required by claim 31 and alleges that this process is only briefly mentioned as an alternative embodiment, with a very general description. The Primary Examiner further asserts that specific details are not provided to enable a process requiring a combination of steps and amounts of xylose and ethanol as claimed and none of the working examples carry out this embodiment.

In response, Applicants have amended claims 1 and 23, to recite “22.3 g/l to 51.2 g/l of ethanol”, as suggested by the Primary Examiner. These amendments are believed to obviate the rejection of claims 1 and 23 and claims dependent thereon, i.e. claims 3, 5-9, 11-13, 15, 16, 19-21, 24-30 and 35. Claims 31 and 36-41 have been canceled without prejudice. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of pending Claims 1, 3, 5-9, 11-13, 15, 16, 19-21, 23-30 and 35 under 35 U.S.C. § 112, first paragraph.

#### **Rejection under 35 U.S.C. § 112, second paragraph**

Claim 30 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Primary Examiner states that there is not clear antecedent basis for “said hexose in said xylose-containing starting material” since claim 23 does not require hexose in a xylose-containing starting material, but requires a starting material comprising xylose and glucose. The Primary Examiner suggests amending claim 30 to cancel “said hexose in said xylose-containing starting material” and insert after material -- comprising xylose and glucose--.

In response, Applicants have amended claim 30 to delete the aforementioned phrase, as suggested by the Primary Examiner so as to recite “said starting material of hydrolyzed

lignocellulose containing material”; claim 30 by virtue of its dependency upon claim 23, implicitly recites “comprising xylose and glucose”, but has been recited again in compliance with the Primary Examiner’s suggestions. The inclusion of “arabinose” as part of the starting material, in addition to xylose and glucose, is supported in Table 2 and Examples 2 and 4 of the specification of the above-identified patent application. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of pending Claim 30 under 35 U.S.C. § 112, second paragraph.

### **Claims Are Free of the Prior Art**

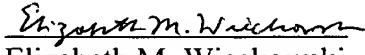
Applicants acknowledge the Primary Examiner’s statement that the claims are free of the prior art.

In summary, Applicants’ claimed process for simultaneous production of xylitol and ethanol provides an effective process that produces high yield products and is not anticipated nor is obvious from the prior art.

In view of the preceding amendments, it is respectfully submitted that the subject application is now in condition for allowance. A Notice of Allowance is earnestly solicited. If the Primary Examiner has any questions or wishes to discuss this matter further, he is kindly asked to call the undersigned attorney.

Respectfully submitted,

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